THE

HOME FRIEND;

A WEEKLY MISCELLANY OF AMUSEMENT AND INSTRUCTION

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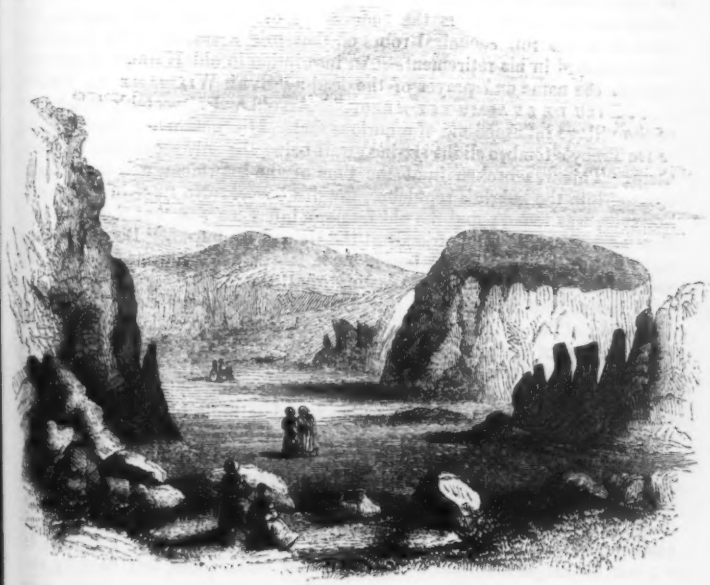
SEA-SIDE PLEASURES, No. III. (*continued*).



BARRICANE.

As I pursue my solitary walks along the lanes and through the meadows, the thought often strikes my mind with powerful interest, that in all probability the roads, and fields, and fences that I look upon have existed nearly as they are now for a thousand years. Improvements, of course, are made; two fields are occasionally thrown into one, or one is divided into two; a new wall is built when the old one has become dilapidated, or a quickset hedge is planted to replace one that is dying out; roads have been

levelled and perhaps macadamized in modern times, and here and there a new line of road has been made. But all these changes do not affect the fact that, generally speaking, the roads and pathways, the subdivisions of the farms into fields, and the sites of the hamlets and villages, remain as they have existed from time immemorial.

The little village of Morte, associated as it is with the history of De Tracy, one of the knights who executed the vengeance of Henry the Second on Thomas à Becket, carries us back to the middle of the twelfth century. It was then a village, as it is now; how much earlier it existed, or how far back we should look to trace its origin, I know not. According to early historians, Sir William De Tracy retired to this neighbourhood; and there is a cave near Ilfracombe which legendary tradition points out as the place of his first concealment. It seems more certain that he took refuge in the remote and isolated village of Morte, which was at that time the property of his family. The old weather-beaten church of grey stone, that rears its tower on a little hill, the most conspicuous object far or near, was built by him as a supposed expiation for his crime, and within an aisle of this church his tomb still stands. Its antiquity is very evident. The black marble cover bears the rude effigy of the repentant knight, but clothed in the full canonical robes of that priesthood which he is said to have assumed in his retirement. An inscription in old Norman characters records the name and prayer of the dead: "SYRE WILLIAME DE TRACE .... DIEU DE SA ALME EYT MERCY." An old and respectable inhabitant of the village informed me of a curious fact. His mother was buried close to De Tracy's tomb, a slight six-inch wall being the only separation between them. This was broken in at the time of the interment, and the people, looking into the knight's sepulchre, saw his bones. No trace of the skull, however, was found; and the old farmer's inference was, that the head had been sent as a relic to his friends at the time of his burial, "Because," said he, "if the head had been buried here, it would have been seen, for we reckon the skull to be the most lasting of all the bones."

If, indeed, the murderer felt the penitence which he professed, the dreary desolation of the scene around him must have been in peculiar keeping with the condition of his mind. Accustomed to the wild excitement of a soldier's life, the jollity of the camp alternately exchanged for the splendour of the court, it must indeed have been a change to wear away his lonely existence in a place like this. The whole region round is high, bleak, and rocky, a succession of elevated downs, partly cultivated indeed, but destitute of trees, of hedges, and almost of bushes, save the prickly furze that crowns the summits of the hills. The land here forms a point which juts out, a headland of ragged rocks, far into the sea, and it is exposed on both sides to the fury of the storms which rage upon this coast with more than usual violence. A summer's sun was sparkling upon the sea when I looked at it; but the ridges and lines of sharp-pointed black rocks, left bare by the receding tide, and bristling up in horrible ruggedness, were even then sufficiently appalling; what must they be when winter winds are howling, when the sky is obscured by murky clouds, and when the sea, lashed up by the tempest, is breaking over those rocks with awful roar, and dashing its masses of white foam far up the precipitous cliffs?

Indeed, this iron-bound coast has long enjoyed an unenviable notoriety in the annals of shipwreck. The name of the village, Morte, is understood to have been derived from the fatality which so commonly attended voyaging along this shore; the Morte Stone, or the Rock of Death, being so named

by Norman mariners, perhaps even long before the Conquest. The Morte Stone is a high and prominent point of a long line of sunken rocks, such as in nautical language is termed a bridge, running out into the sea to a considerable distance. The waves cover them at high water, but breakers almost always indicate their presence.

The unusual frequency of shipwreck on these rocks appears to be owing partly to the fogs which often obscure the atmosphere in winter, but more especially to the currents of this coast. The flood-tide setting strong upon the Stone, and the ebb-tide setting north-west, the difficulties of navigation, and the hazard of striking this dangerous sharp ledge, are greatly increased, not only to strangers, but to those who are well acquainted with its position; and when any vessel strikes the ledge, her loss, and frequently the loss of life to a fearful extent, of necessity follows.

Two years ago last winter, no fewer than five vessels were wrecked here, during the months of January and February. One of these accidents was the occasion of a gallant exploit, whereby nine lives were preserved. Rockham Bay, the little cove I had just quitted, was the scene of this daring and successful feat. The ship "Thomas Crisp," of Bristol, struck on the Morte Stone during a thick fog, on the 17th of January 1850, and immediately went to pieces. The crew, ten in number, took to their boats, with the exception of one man, who was drowned in quitting the sinking vessel.

It happened that the "Cornwall" steamer, a boat that plies weekly between Bristol and Hayle, was passing at the time. Captain Vivian, her commander, heard what at first he took for the wailing cry of a sea-bird; it was, however, repeated, and straining his eyes in the gathering dusk of evening, he saw a black speck. The experienced seaman noticed that no spray broke over it, whence he concluded that the object was afloat, and that it was probably some ship's boat.

It was now five o'clock, a January evening, the sky obscured with fog, and a heavy gale blowing from the westward; a narrow bay was before him, which he knew to be bristling with sunken and exposed rocks, among which the sea was breaking and foaming like a field covered with snow. But humanity called, and the gallant commander, supported by his willing crew, took no counsel with fear, but at once resolved on the perilous adventure of steering his steamer into Rockham Bay. He succeeded, with much labour and danger, in rescuing the nine shipwrecked sailors; but so perilous was his position, that he was obliged to back his vessel out of the Bay, not having room to turn her.

To add to the horrors of this inhospitable coast, a people still more inhospitable reside in the hamlets around, who live by the inhuman occupation of wrecking. A memorial, lately presented to the Trinity Board from the most respectable inhabitants of North Devon, praying for the erection of a lighthouse on the Morte Stone, makes the following statement:—"From the lonely situation of these rocks, and the absence of proper protection, such as a mounted guard, or efficient help in case of need, except from the coast-guard, when called on, under the vigilant superintendence of the Receiver of Droits of Admiralty, much property is lost, and human life sacrificed by the barbarous conduct of lawless wreckers from the neighbouring hamlets."

Women, no less than men, are ready to engage in these lawless deeds; and in the horrible tales which are whispered in the neighbourhood, of violence and even murder, perpetrated upon poor shipwrecked mariners,

women, strange to say, commonly play the most prominent part. It is hoped that matters do not now proceed to such dreadful extremities as these. The present generation well remembers a wretched woman, Bayle by name, who was reputed to have murdered one Captain Harry, the master of a trading vessel, which had run ashore on Woollacombe Sands. The captain had struggled to the rocks at Barricane, where he lay exhausted; when this vile woman, coming up with her "pick," a sort of pitchfork, in her hand, is said to have pushed him back into the sea, and to have kept him under water with the iron prongs, until he was drowned. Tradition states that remorse overcame her reason, and that she died a maniac. It is right to add, however, that a respectable inhabitant of Morte, who remembers the woman well, told me that he thought the imputation of the crime rested on insufficient evidence.

Morte Point.

The farmers of the neighbourhood, on the other hand, have always signalized themselves by their hospitality, cheerfully rendering every assistance in the preservation of life and property. The kind-hearted old man alluded to may possibly have had a pardonable wish to screen his birthplace from a stain so foul.

This worthy farmer kindly offered himself as my cicerone. "You must not go away," said he, "without seeing the ancient stone that's out upon the point. They tell me that it's the work of man, in very old times; and I have heard say that poor human creatures used to be killed there by way of sacrifice."

"Indeed," replied I, "it will gratify me to see it. Lead the way."

Accordingly he took me across the fields and over the downs, for about a quarter of a mile, in the direction of the point, till we came to where the land slopes down to the cliffs. There, just below the brow of the hill, half hidden by trailing brambles, was a huge Crwmlech, an irregular-oval mass of stone, time-stained and grey with scaly lichens, resting partly on the hill side and partly on a single stone at one end, and two (a small one on a large one) at the other. The farmer's mind was occupied with the shelter which the stone afforded to his sheep in stormy weather, and with the sagacity they displayed in crowding under it; but my thoughts wandered back to the time when this country was among "the dark places of the earth, full of the habitations of cruelty;" and I reflected with thankfulness on the Gospel light that now penetrates the remotest corners of this favoured land, so long overspread with Druidical and Papal darkness.

Thence we went round a little, and down a grassy declivity, to a high projecting point, almost cut off from the mainland by deep coves with abruptly precipitous sides. "They call this the *'pin-pin*-something," said my guide, "I never can think of the name."

"The peninsula, perhaps," I suggested.

"That's it, sir. It is a curious place. Look down this cliff into the gully; take care of your steps, for 'tis enough to make one giddy to stand here. You would not expect to find a hare in such a place as this; yet I'll be bound there's one under those bushes, at least there almost always is; see if I don't start her with this stone."

As he spoke he set a large stone rolling down the precipice, shouting at the same time vigorously. The mass shot and bounded down from point to point, and its echoes resounded from the narrow sides of the glen; but no hare appeared. However, I was content to take the matter on his word, especially as he assured me that he had seen a pursued hare partly run and partly leap down this wall of rock, though scarcely less than perpendicular.

"Look at this cove," said he, pointing to a long narrow inlet of the sea on our right, "just at the mouth of it yonder, though it looks so narrow that you would almost fancy you could jump across from rock to rock, the water is amazing deep; we call it Morte Well, it is a famous place for lobsters, and I'll warrant there are several pots sunk there now."

Hence our gaze went out to the Morte Stone, just appearing above water, for we were standing on the fatal Point; and still farther out rose and sank, with every swell of the wave, the tall black buoy which has been moored there as a warning to the incautious mariner.

The conversation naturally turned again to the perils and disasters of shipwreck. Here my guide was eloquent; "Ah! sir," said he, "I've seen sad sights; I've seen as many as five-and-thirty corpses lying upon my father's barn-floor at a time!"

"Tell me the particulars, if you please."

"It is near fifty years ago; the 'Weasel,' His Majesty's sloop of war, was lying in Appledore Pool. One evening it came on to blow a tremendous gale from the north-west. Father went on the top of the hill to look out just before nightfall, and he saw the 'Weasel' right hereaway, under the point; as he came in, he said, 'the sloop will be either on Woollacombe Sands or in Rockham Bay before morning.' He went down pretty early, and all the coves between this and the Sands were full of the wreck; spars and timbers and plank, cordage and blocks, iron and copper

work, casks, and kids, and chests, and officers' furniture, and all sorts of things, most pitiful to see; and what was worse than all, the bodies, all sodden and bleached, were washed up, and lay about the rocks and in the holes, by dozens. We gathered together thirty-five of them, as I told you, and did all we could for them, poor fellows! we gave them Christian burial."

But I now bade adieu to the friendly farmer, and proceeded to follow the rest of our party, who had gone down at once to Barricane, our slow-paced steeds having been put up at Morte. The inn—which blazons forth the name of "THE CHICHESTER ARMS," in large black letters painted on the white wall, and stretching from one end of the house to the other—stands at the very top of the village. From its yard-gate a road winds down for half a mile to Barricane and Woollacombe Sands. But before I proceeded, I paused at the gate for a few minutes, arrested by the soft beauty of the landscape. The swell of the downs in the foreground intercepted the view of Barricane, and of all the other coves which I had just seen from the Point; so that all the ruggedness and savage grandeur, so characteristic of the prospect from thence, was here quite shut out.

NINEVEH—WAR (*continued*).

RIDING-HORSE GEAR.

THE head-gear of the riding-horse did not differ materially from that of the chariot-steed. But instead of the collars and straps that belonged to the yoke, a large crescent-shaped collar, considerably wider in the front than behind, hung loosely around the neck, descending on the chest. It was much decorated, either embroidered or embossed, and furnished with large tassels at its bottom. The rider rarely used any saddle in the earlier periods, but the royal horse was covered with a square fringed cloth that

came half way down the sides, and a square saddle-cloth richly embroidered and fringed was over all. This appears on a reserve-horse led by an attendant after the king hunting in his chariot. A short bridle of plaited thongs, or wreathen chains, was sometimes attached to the bit of a riding-horse, and was used for leading, as well as for guiding; in the latter case, the rider grasped it beside the beast's neck.

The whip was always short; in the earlier era it was a short staff, with a ring of plaited thongs at the end, to which was attached a single lash of apparently a single thong. At Khorsabad there was no plaited ring, but the lash was directly connected with the staff; it was generally thick in the middle, as with us, but in a greater degree; it terminated in one, two, or even three tips. A double-lashed whip appears in the sculptures of Xanthus.

Saddle-cloths had come into common use in the later eras: in both the Khorsabad and Kouyunjik sculptures we see the horsemen seated on a cloth with prolonged corners, generally ending in a tassel, but sometimes cut into three or four points, recalling the idea of a wild-beast's skin with the paws attached, in which it no doubt originated. Large square saddle-cloths are represented on the reserve-horses at Kouyunjik, without any

SADDLE-CLOTH.

housings. Saddle-cloths of the former shape are now extensively used in the East, made of velvet or fine woollen cloth, elaborately embroidered at the edges and corners with gold and silver thread.

"The horses of the Assyrians," as Mr. Layard observes, "were well formed, and apparently of noble blood. No one can look at the horses of the early Assyrian sculptures without being convinced that they were drawn from the finest models. The head is small and well-shaped, the nostrils large and high, the neck arched, the body long, and the legs slender

and sinewy." The spirit, martial courage, and fleetness of the Chaldean war-horses, and the extent to which they were employed in battle, are alluded to by the prophet.

"Their horses also are swifter than the leopards, and are more fierce than the evening wolves: and their horsemen shall spread themselves, and their horsemen shall come from far; they shall fly as the eagle that hasteth to eat." (Hab. i. 8.)

Cavalry, however, seems to have been but little used until the latest period of the empire. A small band of mounted archers was sometimes employed in the early time, clothed in helmet and cuirass, and riding without either saddle or stirrups; and, strange to say, the archer having both hands engaged, was accompanied by another horseman, who riding by his side, held the reins both of his fellow's steed and of his own. Cavalry was used for pursuit of a flying foe; a horseman is represented pursuing, with extended spear, an enemy mounted on a slender dromedary. The Assyrian pursuer has a saddle-cloth, but no stirrups, nor even a bridle.

In the Khorsabad battle-scenes mounted troops are more common. Heavy-armed horse accompanied the royal chariot, always furnished with bow and quiver in addition to their other weapons.

But it is in the sculptures of the Kouyunjik palace that cavalry occurs most numerously. Long lines of horse, well accoutred with helm and corslet, spear and sword, and sometimes with bow and quiver in addition, are represented as accompanying the king in those expeditions into forest-covered mountainous regions, which seem to have been so characteristic of the reign of Sennacherib.

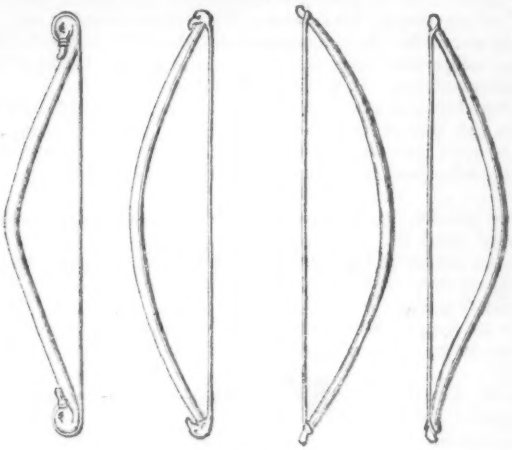
The main reliance was upon the foot-soldiers; and these, like the mounted corps, comprised archers and spearmen. Whether sappers and miners constituted a distinct body, we know not; most probably these offices were undertaken by individuals selected from the common ranks. Artillery men, who worked the mighty and ponderous engines, and who planted and mounted scaling-ladders, were also, of course, foot-soldiers. The infantry in the later periods marched before the chariots, as the cavalry followed them. Their weapons were the bow and quiver, the sword, the spear, and the mace; their defensive armour the helmet, the cuirass, or the complete suit of mail, the round buckler, and the large target. These arms, which were not equally distributed to all the ranks, we now proceed to describe.

The bow has always been considered eminently characteristic of Asiatic warfare, and its prominence in the battle-scenes of Assyria fully bears out what has been handed down to us from classic antiquity. Archers seem to have played the principal part in Assyrian warfare, and to have served not only on foot, but on horseback and in chariots.

The form of the bow was simple, consisting of a single arch, with the points slightly recurved; it was slender, commonly tapering to each extremity, and highly elastic, for when drawn, it formed a semi-ellipse. In some sculptures found at Khorsabad the bows were coloured red; which probably indicated that they were made of bronze. And this agrees with those passages of Scripture, as 2 Sam. xxii. 35; Job xx. 24; and Ps. xviii. 35, in which a "bow of steel" is spoken of; for the word rendered *steel* in these passages, elsewhere signifies brass (or rather bronze, a compound of copper and tin), and is so rendered.

The Assyrian bows when undrawn, but *strung* (as they are invariably represented), frequently formed an obtuse angle in the middle, rather than

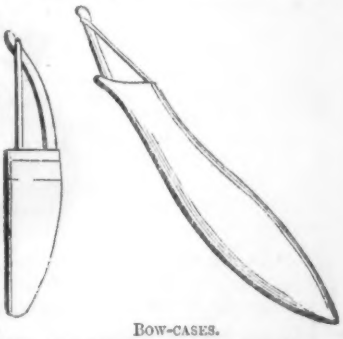
a curve, as if constructed of two pieces united. There was much diversity in the comparative elegance of their shape.



Bows.

The bowstring formed a loop at each end, probably a thong of raw hide so cut; and the extremities of the bow being knobbed had a notch on the upper side, into which the loop was slipped over the end. The ends of the bow were sometimes recurved more or less; and sometimes were fashioned into the head of an eagle. In the later period the head of a duck was the favourite form, the beak laid upon the outer edge, and pointing towards the centre of the bow.

The string was drawn not to the ear, according to the custom of the Egyptians and our own forefathers, nor to the breast, in the ineffective manner practised by the early Greeks, but intermediately, to the right shoulder. When not in actual use the weapon was slung over the shoulder, the arm being passed within the string.



Bow-cases.

A bow-case was occasionally (but very rarely) used, from the earliest to the latest period; for it occurs on a horseman in a hunting scene from the north-west palace at Nimroud, and on two occasions at Kouyunjik, worn both by horse and foot soldiers in mountain forests, where perhaps the humidity of the air was hurtful to the bowstring. In both scenes, however, out of many who carry bows, one or two only carry a bow-case. It was worn behind the left shoulder, and covered only about half of the bow, which it exactly fitted, the rest of the im-

plement projecting from its top. It was probably made of leather, embossed and gilded.

The arrows seem to have been about equal in length to the "cloth-yard shafts" of our Saxon forefathers. What their material was we do not certainly know: Mr. Layard suggests that they were reeds; but at Khorsabad they are painted red, like the bows, with lance-heads of blue, which may indicate a copper or bronze shaft tipped with steel.

The heel being dilated to form the notch, as seen in the spirited hunting scene in the British Museum, in which the lion is gnawing his leg in agony,—would indicate that the shaft was not formed of reed nor of wood, unless a notched button of harder material, as metal or ivory, were attached to it.*

Several allusions in Scripture indicate that arrows were sometimes made of polished metal.

"In the shadow of his hand hath he hid me, and made me a *polished shaft*; in his quiver hath he hid me." (Isa. xlix. 2.)

"Make *bright* the arrows." (Jer. li. 11.)

"For the king of Babylon stood at the parting of the way, at the head of the two ways, to use divination: *he made his arrows bright*." (Ezek. xxi. 21.)

"At *the light of thine arrows* they went, and at the shining of thy glittering spear." (Hab. iii. 11.)

The Assyrian arrows were winged with the vanes of feathers, attached one on each side a little above the notch, and trimmed symmetrically. The feathers of large birds were alone suitable for this purpose.

Whether poisoned arrows were used by the Assyrians we have no evidence; the Greeks and Romans considered them as indicative of a barbarous warfare, unworthy of civilized armies. Several Asiatic nations used them, as the Sauromatæ, Getæ, Scythians, and Arabs. Job, who is supposed to have been an Arab, distinctly alludes to the practice.

"For the arrows of the Almighty are within me, the poison whereof drinketh up my spirit." (Job vi. 4.)

BISHOP JEWELL.

DIED 1571. AGED 49.

DR. JOHN JEWELL was eminent for piety, learning, and meekness of disposition; he was Bishop of Salisbury, and is well known by his work, an "Apology for the Church of England."

* In the Great Exhibition were arrows taken from the Sikhs in the late war, in which the shaft is of reed, the point of steel, and the γλυφίς of ivory; the form of this last is much like that of the Assyrian.

In his life of Richard Hooker, Isaac Walton says "That as Bishop Jewell lived so he died, in devout meditation and prayer, and in both so zealously, that it became a religious question, whether his last ejaculations or his soul did first enter into heaven."

We are informed by his biographer, that when he was urged not to exert himself too much by preaching on a certain occasion, as it was better that the people should want one sermon than be altogether deprived of such a preacher, the bishop replied, "It best becometh a bishop to die preaching," seriously thinking perhaps upon the comfortable assurance of his Master, "Happy art thou, my servant, if when I come, I find thee doing." Wherefore that he might not deceive the people's expectation, he ascended the pulpit; and now, nothing but spirit (his flesh being pined away and exhausted), read his text out of Galatians v. 25, "Walk in the Spirit," and with much pain made an end of his discourse. Presently after the conclusion, he was forced to take his bed, and concluded that his dissolution was not far off.

The following Saturday, nature shrinking and failing, he called all his household about him, and, after an exposition of the Lord's Prayer, thus breathed forth his last address:—

"I see that now I am to go the way of all flesh, and I feel the arrows of death already fastened in my body; wherefore I am desirous, in a few words, whilst yet my most merciful God vouchsafeth me the use of my tongue, to speak unto you all. It was my prayer always unto God, since I had my understanding, that I might honour his name with the sacrifice of my flesh, and confirm his truth with the oblation of this my body unto death, in the defence thereof; which seeing He hath not granted me in this, yet I somewhat rejoice and solace myself that it is worn away and exhausted in the labours of my calling. For while I visit the people of God, God, my God, hath visited me. I beseech you all that are about me, and all others whom I ever offended, to forgive me. And now that my hour is at hand, and all my moisture dried up, I most earnestly desire of you all this last duty of love, to pray for me and help me, with the ardency of your affection, when you perceive me, through the infirmity of my flesh, to languish and wax cold in my prayers. Hitherto I have taught you and many others, now the time is come wherein I may and desire to be taught and strengthened by every one of you."

Having thus spoken, with something more to the like purpose, with much pain and interruption, he desired them to sing the 71st Psalm, which begins thus: "In thee, O Lord, I put my trust, let me never be confounded;" himself joining with them as well as his exhausted strength would permit. And when they recited those words, "Thou art my hope, O Lord, my trust even from my youth," he added, "Thou only wast my whole hope;" and as they went forward, saying "Cast me not off in the time of age, forsake me not when my strength faileth me; yea, even to mine old age and grey head forsake me not, O God," he made this application to himself, "He is an old man, he is truly grey-headed, and his strength faileth him, who lieth on his death-bed." To which he added other short prayers, as if he were moved thereto, by the power of God's Spirit, saying, "Lord, take from me my spirit. Lord, now let thy servant depart in peace: break off all delays; suffer thy servant to come unto Thee: command him to be with Thee; Lord receive my spirit."

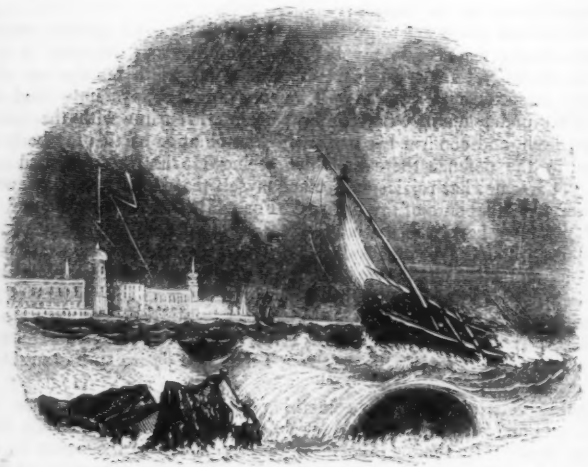
At this time, when one of those who stood by prayed with tears, that, if it might stand with God's pleasure, He would restore him to his former

health, the pious Jewell overhearing him turned his eyes, as if he were offended, and spoke to him those words of Ambrose:—"'I have not lived so that I am ashamed to live longer, neither do I fear to die, because we have a merciful Lord.' A crown of righteousness is laid up for me. Christ is my righteousness. Father, let thy will be done; thy will I say, and not my will, which is imperfect and depraved. Lord, confound me not. This is my to-day," alluding probably to those words of Christ, "To-day shalt thou be with me in Paradise;" "This day let me quickly come to Thee. This day let me see the Lord Jesus!"

After a few fervent inward prayers of devotion, and sighs of longing desires, the soul returned to God that gave it. Mr. Ridley, the steward of his house, closed his eyes. Such was the death of Bishop Jewell, a most worthy trumpet of Christ's glorious Gospel.*

MEDITATION.—"Let me die the death of the righteous, and let my last end be like his!"†

MONSOONS.



In the Indian Ocean certain periodical winds prevail, which blow for nearly six months of the year in one direction, and for the other six in an opposite direction. The Malays call them *Mooseen*, which signifies *year* or *season*. In English, this term has been corrupted into *Monsoons*.

These winds blow with most regularity between Hindostan and the eastern coast of Africa. When the sun is south of the equator, that is, from October to April, a north-east monsoon prevails; but when the sun is north of the equator, that is, from April to October, a south-western current becomes established. When the sun passes the equator and the monsoons are changing their direction, variable winds or tempests generally occur. This disturbance is called by seamen the *breaking up of the monsoons*.

* Life of Bishop Jewell, prefixed to Jewell's "Apology;" Garbrand, &c.
† Num. xxiii. 10.

The south-west monsoon is the most remarkable rainy season in India; and a description of it will convey a correct idea of the monsoon in the greater part of India. It extends from Africa to the Malay peninsula, and deluges all the intermediate countries within certain lines of latitude for four months in the year. In the south of India this monsoon commences about the beginning of June, but it gets later in advancing towards the north. "Its approach is announced by vast masses of cloud that rise from the Indian Ocean, and advance towards the north-east, gathering and thickening as they approach the land. After some threatening days, the sky assumes a troubled appearance in the mornings, and the monsoon in general sets in during the night. It is attended with such a thunderstorm as can scarcely be imagined by those who have only seen that phenomenon in a temperate climate. It generally begins with violent blasts of wind, which are succeeded by floods of rain. For some hours lightning is seen almost without intermission: sometimes it only illuminates the sky, and shows the clouds near the horizon; at others, it discovers the distant hills, and again leaves all in darkness, when in an instant it reappears in vivid and successive flashes, and exhibits the nearest objects in all the brightness of day. During all this time the distant thunder never ceases to roll, and is only silenced by some nearer peal which bursts on the ear with such a sudden and tremendous crash as can scarcely fail to strike the most insensible heart with awe. At length the thunder ceases, and nothing is heard but the continual pouring of the rain and the rushing of the rising streams. The next day presents a gloomy spectacle: the rain still descends in torrents, and scarcely allows a view of the blackened fields; the rivers are swollen and discoloured, and sweep down along with them the hedges, the huts, and the remains of the cultivation which was carried on during the dry season, in their beds.

"This lasts for some days, after which the sky clears, and discovers the face of nature changed as if by enchantment. Before the storm, the fields were parched up, and, except in the beds of the rivers, scarce a blade of vegetation was to be seen: the clearness of the sky was not interrupted by a single cloud, but the atmosphere was loaded with dust, which was sufficient to render distant objects dim, as in a mist, and to make the sun appear dull and discoloured till he attained a considerable elevation: a parching wind blew like a blast from a furnace, and heated wood, iron, and every other solid material even in the shade; and immediately before the monsoon this wind had been succeeded by still more sultry calms. But when the first violence of the storm is over, the whole earth is covered with a sudden but luxuriant verdure; the rivers are full and tranquil; the air is pure and delicious; and the sky is varied and embellished with clouds. The effect of this change is visible on all the animal creation, and can only be imagined in Europe by supposing the depth of a dreary winter to start at once into all the freshness and brilliancy of spring. From that time the rain falls at intervals for about a month, when it comes on again with great violence; and in July the rains are at their height: during the third month they rather diminish, but are still heavy; and in September they gradually abate, and are often entirely suspended till near the end of the month, when they depart amid thunders and tempests as they came."*

The effect of the monsoon upon the ocean is well described by Mr. Forbes. He says, "at Anjengo the monsoon commences with great

* Elphinstone's Caubul.

severity, and presents an awful spectacle; the inclement weather continues with more or less violence from May to October. During that period the tempestuous ocean rolls from a black horizon, literally of 'darkness visible,' a series of floating mountains heaving under hoary summits, until they approach the shore, when their stupendous accumulations flow in successive surges, and break upon the beach: every ninth wave is observed to be generally more tremendous than the rest, and threatens to overwhelm the settlement. The noise of these billows equals that of the loudest cannon, and, with the thunder and lightning so frequent in the rainy season, is truly awful. During the tedious monsoon I passed at Anjengo, I often stood upon the trembling sand-bank to contemplate the solemn scene, and derive a comfort from that sublime and omnipotent decree, 'Hitherto shalt thou come but no further; and here shall thy proud waves be stayed.'"

WEYMOUTH.

In the inner curve of a spacious and beautiful bay, formed on the coast of Dorsetshire, by the promontories of St. Alban's Head and Portland Bill, and at the mouth of the little river whence it takes its name, stands the ancient port of Weymouth, now better known as a favourite autumnal watering-place than a sea-port.

Sheltered by hills, the fine beach round which it spreads, forms a gradual descent of firm and level sand, rendering it a delightful promenade for the lovers of the sea-side, while, at the same time, they can enjoy many of the advantages of an ocean climate in true perfection; for so equable and temperate are the seasons, that many plants which in other parts of England require protection from cold, flourish at Weymouth throughout the winter in the open air. The geranium grows luxuriantly, and the

large and small-leaved myrtle are out-of-door plants; in fact, the salubrious climate, in every point, justifies the opinion of the celebrated Dr. Arbuthnot, who came in his early days to settle at Weymouth, and remarked, that "a physician could neither live nor die there."

The town of Weymouth was formerly a distinct borough, but in the reign of Elizabeth it was united with Melcombe Regis, a town so called from being built on the demesne lands of the Crown, and both places are now known by the general name of Weymouth. They are divided from each other by an estuary or arm of the sea, which forms the harbour, and united by a bridge thrown across the narrowest end of the piece of water, which widens in an irregular form, somewhat in the shape of a bottle. The lower part is called the Backwater, and from this, a considerable portion of the land on which Melcombe stands has been reclaimed, a process which is still going on.

The admirable situation of the harbour did not fail to render Weymouth a place of considerable trade at an early period; and its commerce with France, Spain, and Newfoundland, long sustained the maritime importance of the town; and in the time of Edward III. (1347), the quota of men and ships which it furnished was much larger than that of many ports which have since risen into importance.

In the reign of Henry VII. (1505), Philip of Castile and his Queen, going down the Channel from Middlebourg, with 80 sail of vessels for Spain, were glad to take refuge in this port from a heavy gale; and when the fact became known to Henry VII., he sent down the Earl of Arundel with a troop of 300 horse to escort Philip on a friendly visit to London. The occurrence is remarkable, as leading to the ennobling of the Russell family, a gentleman of that name having, from his knowledge of the Spanish language, been invited to accompany the Royal party and to act as interpreter between the monarchs. Becoming, subsequently, a favourite at Court, and especially with the young prince, John Russell was created Duke of Bedford.

Another interesting fact connected with Weymouth, we gather from a MS. history of Dorsetshire, written by John Coker, and now in the British Museum, which states, that on the south side of Portland Island, the Spanish Armada made an attempt to land their supposed invincible army; "but," says the quaint historian "they were prevented by the English, and between them there began, in the sight of the whole coast, such a fight, that they were forced to acknowledge their army vincible, and to shift for themselves, though many hundreds of them came short home, and two of their great shippes, with a Don, brought into Weymouth."

In the reign of James I., Weymouth was alluded to, as "a great and famous port, and as nourishing and employing a great number of mariners;" but from this period the place may be considered to have been in a declining state until after the middle of the last century. It began to recover from its depression about the year 1763, when a gentleman of Bath, named Allen, brought it into repute as a bathing place. On his first visit to Weymouth, no bathing machine existed, and he was obliged to get one made for his own use; but having greatly benefited during his visit by the pure mild air, his recommendation of the place soon brought other invalids in pursuit of the same objects, and the usual accommodations of a watering place speedily sprung up. In 1780, the Duke of Gloucester passed a winter at this spot, and subsequently built a house for his own

residence there. In 1789 George III. paid his first visit, and from that time, Weymouth became a very favourite resort for the Royal family. It was discovered to be the "Montpelier of England;" and the "plague of building lighting upon it," as old Fuller remarks, "it spread, until goodly rows of houses offered ample accommodation to the numerous visitors of so genial a resort for health and amusement

The absence of all idle ceremony, the early hours, and simple, yet rational recreations which characterised the visits to Weymouth of the then Royal family, remind us forcibly of the habits of our own beloved Queen, either in her autumnal home at Balmoral, or during her sea excursions at all seasons. "At seven in the morning," we find, "George the Third, Queen Charlotte, and three of their daughters, starting from Windsor with a few attendants, in a cavalcade consisting of but three carriages, and proceeding by Winchester and Southampton to Lyndhurst Lodge, now called the king's house, in the New Forest, where they spent several days. At their entrance into the Forest, their Majesties received the homage of Sir Charles Mills, who holds the manor of Langley, upon condition of presenting the King, whenever he passes that way, with a brace of white greyhounds in silver collars, led in a silken cord, and coupled in a golden chain; a circumstance which seems to have afforded the young princesses great gratification."

During the residence of the Royal family at Weymouth, early hours became quite fashionable; for at six in the morning the King, Queen, and Princesses frequently made their appearance on the promenade, and at a time when most of the fashionable world in other parts of England might be presumed to be still enjoying their morning sleep, the Royal party were more than once on the sea-shore of Weymouth, watching the important process of "hauling the seine" (a fishing-net of great length, so called), and witnessing the interesting sight of from five-and-twenty to thirty thousand mackerel or herrings, struggling in captivity on the sands, and sparkling like jewels in the early sunbeams, a sight which still seldom fails to attract all the visitors of Weymouth, and enables those interested in natural history to gladly secure "many good specimens," the growth of deeper waters than the sea-weeds, echinæ, shells, &c., which are generally to be found on the shores of this neighbourhood.

The magnificent man-of-war and a frigate, which constantly rode at anchor for the purpose, took the Royal party on frequent excursions into the Channel, and from these they invariably returned to dine at four o'clock. Many stories are current of the King's affability towards the residents, of all classes, and one in particular we cannot forbear noticing: it is that of a poor man who had been confined for seven years in Dorchester gaol for a debt of 220*l.*, which His Majesty generously paid. The young Princess Charlotte was also a great favourite here, and especially among the naval officers and seamen, as she had a considerable partiality for ships and nautical matters, and often went on short cruises in the sloops, frigates, and line-of-battle ships that occasionally touched in the harbour, frequently braving a tolerably rough sea in an open barge, and ascending the ladder on the ship's side by the man-ropes, instead of accepting the chain which accommodated her attendants. The Royal family regularly attended the parish church, excepting once, when they honoured the officers of the "Magnificent" by being present at Divine service on board, a circumstance which gave rise to great preparation in order to receive the illustrious visitors with due and becoming respect.

Weymouth offers great facilities for sea-bathing, as the fine expanse of sand around the bay of Weymouth descends so gradually that at a distance of 300 feet from the shore, the water is not more than knee deep, while at the same time it is so firm and level that horses and carriages may be driven close to the water's edge. The semicircular bay, with St. Alban's Head in the distance, and Portland Isle towards the S. W., lies on the east of the esplanade, while terraces of fine houses lie on the west. Skirting the beach, and having flights of steps for ascending at convenient distances, is the Esplanade; raised above which is an embankment of masonry, forming one of the finest marine parades in Europe. On one side is a noble terrace of houses, on the other the ocean itself.

Distant from Weymouth between four and five miles is the mass of freestone called Portland Isle, though, in reality, it is but a peninsula, connected with the mainland by a ridge of pebbles, called Chesil banks. This bank extends nearly seventeen miles in a N.W. direction along the coast of Dorset, from which it is separated by an arm of the sea called the Fleet, thus forming one of the most extraordinary ridges or shelves of land in Europe, and perhaps the longest, if we except that of Memel, in Polish Prussia. Its average height is from fifty to sixty feet above the level of the sea, and its breadth varies from a quarter to half a mile; the pebbles of which it is formed consist, chiefly, of a white calcareous kind, but there are many of jasper, quartz, &c. They gradually diminish in size from the Portland end of the bank, to that which attaches it to the mainland, and are throughout so loosely thrown together, that the legs of a horse sink almost knee deep at every step. Several ingenious theories have been advanced to account for the formation of this curious work of nature, but they have been hitherto considered unsatisfactory. The *consequence* of this self-raised barrier, from the depths of the ocean, may be imagined, when its summit is reached, for it is capable of opposing the most furious tempest, and the neighbouring country probably owes much of its security to this wonderful bulwark of nature. Near the projecting peninsula of Portland, where these stones first touch the shore, they are the largest in size and least rounded in form; but as the drift of the currents, and the pressure of the ocean, continually drive them farther and farther in towards the bay, they become smaller and smoother, and are so reduced by constant attrition, that in a series of years masses of ten or twelve pounds will become little pebbles of an ounce each; and this diminution of size is so gradual, that the smugglers can, it is said, when landing upon the beach in a dark night, tell the relative distance from either extremity of this long neck, by the size of the pebbles alone. During a storm the breaking of the sea, and the commotion of the pebbles, form together an imposingly magnificent sight and sound. When a north wind prevails, the pebbles are washed away.

"It is a grand and interesting sight," remarks an old traveller, "to stand upon the topmost ridge of the isthmus and look to the western edge, where the waves roll in with such force as to wash the largest stones up to the farthest limit that the water reaches, keeping the whole mass in a constant state of attrition; and as far as the eye can reach, the surf having a line of snow-white foam in unbroken continuity. Then turning to the eastern side of the ridge to mark the even sandy slope which borders the perfectly smooth and tranquil bay." Occasionally, though, during a terrific gale, the waves have been known to ride over the whole ridge, and during the great storm of 23rd November 1824, a vessel of ninety-five tons, in the

service of the Ordnance, laden with heavy iron guns, and bound to Lough Swilly, was saved in a most extraordinary manner, by being carried over the beach in a tremendous sea, at the period of high water, and ultimately, by the exertions of the hardy islanders, the vessel was finally launched into the Swannery-fleet on the Weymouth side.

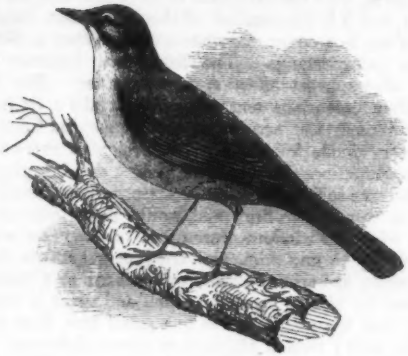
This Swannery-fleet receives the waters of several rivulets, and runs into the open sea at its south-eastern extremity, by a narrow channel, called Small-mouth. At its N.W. extremity it forms a swannery (whence it obtained its name), which contains sometimes seven to eight hundred swans, and is, with the ruins of the old Abbey at Abbotsbury, a great object of interest to strangers.

The want of a safe roadstead, or harbour of refuge, in the vicinity of Portland, led to the commencement of the breakwater now in progress, by which the beautiful bay included between Portland, Lulworth, and Weymouth, will soon be as effectually protected from the influence of the south-easterly gales, as it is already guarded by nature from every other quarter of the compass.

The breakwater, which extends a mile and a quarter in a N.E. direction from nearly the western point of the island, in about seven fathoms of water, has an opening of one hundred and fifty feet at a quarter of a mile from the shore, and shelters an area of nearly 1200 acres. The cost is estimated at about 500,000*l.*, an amount which would be utterly inadequate for the purpose at any other part of the British coast, and, when compared with the cost of the one at Plymouth, appears but inconsiderable. This however, is owing to the employment of convict labour, and the proximity of Portland Isle, which affords ample materials for the work in the "Capstone" from the quarries. This far exceeds the good building stone in quantity, and has hitherto been almost considered as rubbish. It is now found to be admirably calculated for the purpose of a breakwater, and thus the engineers have at hand an abundant supply of material which has scarcely any mercantile value, and which is taken from that part of the island constituting the property of the Crown.

The foundation stone of this important structure was laid by Prince Albert in 1848; and when His Royal Highness visited the spot in the summer of this year (1852), the breakwater had not only made a considerable appearance above the water, and well withstood the gales of the preceding winter, but had proved its usefulness during the long prevalence of the stiff east and south-easterly winds, which were so severely felt in the early part of the season at other parts of the coast; for, during this critical period, the water sheltered by the Portland breakwater was quite smooth, and the harbour rendered as safe as it is commodious. A squadron stationed at this spot will, in future, have under its protection, jointly with Dartmouth, all the intervening coast; and these places, with Plymouth, will complete the chain of communication between Dover and Falmouth, a distance of 300 miles.

OUR NATIVE SONGSTERS.



CHIFF-CHAFF.

FLOCKS of little birds may be seen in March, which will, as spring advances, fill our now almost silent woodlands with melodies. Among the earliest of our spring arrivals is the Chiff-chaff,* or, as it is often called, Chip-cnap (*Sylvia hippolais*). If its song is not remarkable for variety or richness, yet it is pleasing, because it reminds us that the singing birds which have sought in winter for a more congenial climate, are now coming back to their old haunts; and the notes which would hardly attract us amid the full chorus of song, are welcome now that song is scarce. This song is sometimes sung as early as the middle of March, and towards the end of that month is common. All the summer it is to be heard at intervals, and the hardy little bird lingers with us in some years till late in October, coming in company with the titmice and crested wren, to the gardens or fir plantations, and uttering its cheering notes often for many hours together, for some days previous to its departure. Sometimes this bird sings on the wing, as it darts across the garden path in search of insects, and at others it utters its strain from the high branches of the trees of those shady woods and thickets which it loves to haunt. Large gardens, too, furnish a favourite resort to the chiff-chaff, where it is most persevering, in spring, in clearing the aphides off the honeysuckles, rose-trees, and other bushes. And when in the latter part of March the golden balls of the willow-tree attract, by their sweet perfume, an occasional butterfly, a wasp, a bee, or some other winged creature, then our elegant little bird may be seen, as Mr. Knapp has said, itself almost like a coloured catkin too, chasing the insects right merrily around the willow, or other bough, or making its way to the orchard, not to eat the young buds, but to peck out the larvæ of the different species of *tortrix*, which lie enfolded in their green coils. The gardener may welcome the bird there all the summer through, for neither apple, nor cherry, nor plum will tempt it to plunder, while it will clear the trees of the insects, and feed unsparingly on the

* The Chiff-chaff is four inches and three-quarters in length. Whole upper parts ashy-brown; lower parts dull brownish-white, tinged with yellow; a pale streak over each eye; beak and feet dark brown.

small caterpillars, and the downy moths, and the gnats and emmets, which may revel among the trees, or grass, or flowers.

The chiff-chaff is, with the exception of the wheat-ear, the earliest of the spring visitors; and it is the smallest of them all. Mr. Broderip mentions having received one in a cover, together with a written half-sheet of paper, franked by the penny stamp. The little bird becomes very tame in captivity, and shows great affection to its owner. Mr. Sweet, in his "British Warblers," mentions one which would take a fly from his finger, and would settle upon the hand which held a spoon filled with milk, of which it was very fond, following the person who carried it round and round the room, sometimes darting to the ceiling and bringing thence a fly. By degrees it became so familiar with its master, that it would sit and sleep on his knee as he sate by the fire; and would never attempt to fly out of the room, even when the windows were open. Mr. Sweet wished to ascertain if it was willing to quit him, and tried to get it into the garden, but though its favourite spoonful of milk was offered as a persuasive, it was difficult to induce the bird to leave the room, and twice it returned thither. The third flight that it attempted, was to a small tree, from which it again came to taste the milk; then it alighted on some chickweed; then bathed, and betook itself to a holly bush to dry its plumes. Here, however, the little bird was lost among the leaves. Its master's voice seemed unheard, and most probably the impulses of its migratory nature came powerfully upon it. Perchance some strange instinctive longing for a warmer land, with its fruits and flowers, and gauzy insects; some yearnings for companions, some restless desire for flight proved stronger than even its affection for its master, and away it went, to be seen no more, though all its species had long since departed, and were gone to see if November were less dreary in other lands than in ours.

The nest of the chiff-chaff is an oval structure, with a small aperture near the top. It is made of coarse dry grasses, externally coated with leaves, and lined with feathers. It is usually placed near the ground, in a low bush, or sometimes amid the thick grass on a bank; and it contains six white eggs, speckled with purplish red at the larger end. John Clare, who knew so well the different objects which are to be seen by those who dwell in the country, has well described this nest. He calls the bird the Petty-chap, and it is well known to naturalists by the name of Lesser Petty-chap:—

"Well! in my many walks I've rarely found
A place less likely for a bird to form
Its nest—close by the rut-gull'd wagon road,
And on the almost bare foot-trodden ground,
With scarce a clump of grass to keep it warm!
Where not a thistle spreads its spears abroad,
Or prickly bush, to shield it from harm's way;
And yet so snugly made, that none may spy
It out, save peradventure. You and I
Had surely pass'd it in our walk to-day,
Had chance not led us by it! Nay, e'en now,
Had not the old bird heard us trampling by,
And flutter'd out, we had not seen it lie
Brown as the road-way side. Small bits of hay
Pluck'd from the old propt haystack's bleachy brow
And wither'd leaves, make up its outward wall,
Which from the gnarl'd oak-dotterel yearly fall,
And in the old hedge-bottom rot away.

Built like an oven,—through a little hole,
Scarcely admitting e'en two fingers in,
Hard to discern, the birds snug entrance win.
'Tis lined with feathers, warm as silken stole,
Softer than seats of down for painless ease,
And full of eggs, scarce bigger even than peas!
Here's one most delicate, with spots as small
As dust, and of a faint and pinkey red.
Stop! here's the bird. That woodman at the gap
Frighten'd him from the hedge: 'tis olive green.
Well! I declare, it is the Petty-chap!
Not bigger than the wren, and seldom seen.
I've often found her nest in chance's way,
When I, in pathless woods did idly roam;
But never did I dream, until to-day,
A spot like this would be her chosen home."

The chiff-chaff is also called the Dark-legged Petty-chap, to distinguish it from the willow wren, which it much resembles, though smaller, being however at once distinguished from it by the dark-brownish, almost black, colour of the legs and feet. Mr. Blyth remarks, that there is a peculiarity in its song not generally noticed: its common note, tick, tack, is known to us all; but this gentleman remarks, that after repeating this, seven or eight times in monotonous succession, it frequently alternates it with another sound, resembling crah, crah, or cruh, reminding one of the harsh tones of the Reedlings.

The Scotch have an old proverb respecting small people,—"Little folks are soon angry—their heart's near to their mou';" and it might be quoted in relation to this tiny bird, which is of a most quarrelsome disposition, even daring to attack birds much larger than itself. The writer just alluded to, remarks, "Last spring I was walking under some tall elms, from the top of which a chiff-chaff was, at intervals, repeating his double cry. A large common, overspread with furze, lay in one direction, while thousands of the song petty-chaps were warbling merrily. At length one of these settled on a bush close under the trees, and began to sing; whereupon down came the little chiff-chiff from above, and I witnessed a long-sustained battle between the two, both warbling their diverse notes in defiance, and by turns attacking and pursuing each other. Each indeed seemed to consider the other an antagonist of its own species, for it is seldom that different species quarrel, though a few will drive away all intruders from their abode." This writer adds, that there are, however, several allied species, which seem quite to regard each other as enemies, as the robin and red-tail, the whin and the stone-chats; and these will quarrel with each other, though amiable enough with birds less nearly allied; and on this principle the different kinds of petty-chaps are very apt to fight in captivity.

Another early bird among our summer visitors is the Willow Wren* (*Sylvia trochilus*), called also Yellow Wren, Haybird, Garden Petty-chaps, Huck-muck, or Ground Wren,—the last name alluding, doubtless, to the place of its nest. The song of this bird may be heard in April, and is very loud and clear, making the woods to echo with the sound. A writer in the "Magazine of Natural History" remarks,—"Its song, if

* The Willow Wren is about five inches in length. Upper parts dull olive, more brown on the wings and tail; under parts whitish, tinged with yellow, except on the belly; a pale streak over each eye: legs and feet pale brown.

deserving of that name, has never been properly described in our works of natural history. It consists of whistling notes, which it runs through the gamut of B, thus comprising ten notes: the latter ones are very soft, and run into each other; and though it would thus appear anxious to be well grounded in the principles of music, by thoroughly and constantly practising the gamut like a true musician, yet it never arrives at greater musical perfection; and its notes, though soft and melodious, are not sufficiently diversified to merit the name of song."

This is a common bird in shrubberies and hedgerows in all parts of Britain, except in the counties of Cornwall and Devonshire. Sometimes its song is to be heard as it wings its way among the trees from bough to bough; at others it is sung while the little bird is perched on the summit of some high tree, or sits among the yellow furze or broom of our heath lands. A merry bird is seems,—all life and animation, hopping over the ground in search of insects, or catching them on the wing, and passing by the garden fruits with indifference, save where they serve as an attraction to insects, and thus afford a meal. When in captivity, this bird soon becomes familiar, and sings long and loud; and it has been known to enter the open windows of houses, and to fly about the room for some time, occasionally uttering a little sharp note. The willow wren quits us in September, and sings a little in autumn, but not with the vigour or joy of spring.

The nest of this bird is composed of grasses, mosses, and dried leaves, and lined with feathers. It is of an oval or rounded shape, having a small opening near the top, and containing six or seven eggs, which are white, spotted with reddish brown, the spots being most numerous at the larger end. It is usually built in May, and is concealed among the moss or grass of the hedge-bank.

An interesting account of the attachment of the willow wren to its nest, is given by a lady who writes thus in the "Field Naturalist"—"In the spring of 1832, walking through an orchard, I was attracted by something on the ground in the form of a large ball, and composed of dry grass. I took it up in my hands, and upon examination, found it was a domed nest of the willow wren. Concerned at my precipitation, I put it down again as near the same place as I could suppose, but with very little hope that the architect would ever claim it again after such an attack. I was, however, agreeably surprised to find next day that the little occupier was still proceeding with its work. The feathers inside were increased, as I could perceive by the alteration in colour. In a few days two eggs were laid, and I thought my little protégé safe from harm, when a flock of ducks that had strayed from the poultry-yard, with their usual curiosity, went straight to the nest, which was very conspicuous, as the grass had not grown high enough to conceal it, and with their bills spread is quite open, displaced the eggs, and made it a complete ruin. I now despaired; but immediately, on driving the authors of the mischief away, I tried to restore the nest to something like its proper form, and placed the eggs inside. That same day, I was astonished to find an addition of another egg, and in about a week, of four more. The bird sate, and ultimately brought out seven young ones; but I cannot help supposing it a singular instance of attachment and confidence, after being twice so rudely disturbed."

THE SPIDER—AS AN EXAMPLE OF PERSEVERANCE (*continued*).

This surprising proof of perseverance in overcoming difficulties is worthy of being kept in remembrance. It is an example that may be as useful to us as a less remarkable one was to Robert the Bruce. Scarcely less interesting is Mr. Blackwall's account of the gossamer spiders. These are the little creatures that make those floating webs seen in the air, or covering the surface of the ground, about the month of October. Several of these spiders were put on a small branched twig, placed upright in an earthen vessel of water. Whenever the insects were exposed to the slightest current of air, they directly turned themselves towards the quarter whence it came, and, elevating their spinners, they sent out a small portion of glutinous matter, which was instantly carried by the air into a line consisting of four finer lines. The spiders, in the next place, carefully ascertained whether their lines had become firmly attached to any object or not, by pulling at them with the first pair of legs; and if the result was satisfactory, after tightening them sufficiently, they made them fast to the twig; then applying their spinners to the spot where they stood, they discharged a little more liquid gum, and committing themselves to these bridges of their own constructing, they passed over them in safety, drawing a second line after them, as a security in case the first gave way, and so effected their escape.

Such was invariably the result when spiders were placed where the air was liable to be sensibly agitated; but on covering them over with a glass shade, they remained in this situation during seventeen days, evidently unable to produce a single line by which they could quit the branch they occupied without encountering the water at its base; though on the removal of the glass they regained their liberty with as much speed as in the before-mentioned cases. Mr. Blackwall tried the same experiment with several geometric spiders, and always with the same success.

Another ingenious observer, Mr. Rennie, has recorded a series of experiments bearing upon the same point. He placed several spiders in empty wine-glasses, set in tea-saucers filled with water. When they discovered, by repeated descents from the brims of the glasses, that they were thus surrounded by a wet ditch, they all set to work to throw their silken bridges across it. For this purpose they first endeavoured to ascertain the direction of the wind, or rather which way any current of air set (as the experiment was tried in a room), by raising their arms as seamen are accustomed to do in calm weather. But it will be sufficient to notice the proceedings of one of the little band of prisoners, which was a gossamer spider.

Finding no current of air on any quarter of the brim of the glass, it seemed to give up all present hopes of constructing its bridge of escape, and placed itself in the attitude of repose, prepared to wait in patience for a breeze; but no sooner did Mr. Rennie produce a stream of air by blowing gently towards its position, than the little animal was up and stirring; it instantly fixed a thread to the glass, and laying hold of it with one of its feet by way of security, it placed its body in an upright position, with its spinnerets extended outwards; and immediately a thread was seen streaming out from them several feet in length, on which the little aeronaut sprung up into the air, and thus escaped.

In the formation of their nets spiders are regulated chiefly by the sense of touch, which they possess in high perfection.

"The spider's touch, how exquisitely fine;
Feels at each thread, and lives along the line."

They find out when they have the full number of rays by going to the centre and touching each in succession with the feet, supplying deficiencies wherever they are perceived. They also construct their snares as well in the dark as in the light; for spiders having been shut up in glass jars and placed in the dark, produced during their captivity nets of admirable workmanship.

The silken lines of the web are of various degrees of strength and elasticity; the rays and marginal lines have but little elasticity, but the viscid line possesses it to a remarkable degree, and is thus adapted to the frequent and rapid changes in distance that take place among the rays when the net is agitated by winds or other disturbances, while the insects that fly against it are more completely entangled than they otherwise could be without doing extensive injury to the framework of the snare. That they may find out whether the entangled flies are alive or dead, the geometric spiders pull the rays with their feet, and suddenly letting go their hold, produce by this means a vibratory motion in the net which seldom fails to rouse such insects as are ensnared. Guided by the struggles of her prey, the spider runs along the nearest ray to seize her victim, avoiding any contact with the viscid line as much as possible, and drawing out after her a thread attached to one of the lines near the centre of her net, which helps her return.

As the spider cannot pursue her prey, she has to exercise patience in waiting for what chance may bring to her net. Even in the busy insect districts of the fruit and flower garden, the geometric spider has often to undergo a long fast. Wet and windy weather may destroy all her webs, and prevent her from spinning others, perhaps for weeks; during all which time she is without food. And when at length a new net is formed, or the old one repaired, some bee or wasp, or large fly, too strong and bulky for the little geometrician, may get entangled in the snare, and reduce it to ruin in its efforts to escape. But all these accidents do not disturb the temper of the patient spider. She sits watching, without ever moving, until the lucky moment arrives when a manageable fly is caught. She is then all activity, and uses her utmost skill to prevent escape. If the insect be of small size, the spider conveys it at once to her hiding place; and having sucked out all the juice, throws out the carcase. If the insect should be too large to be directly attacked, the spider nimbly and skilfully coils a number of threads round its body in various directions, securing both its wings and legs; it is then conveyed to the den, and devoured at leisure.

Mr. Darwin notices a large spider common about Rio de Janeiro, which, when any large insect, such as a grasshopper or wasp, is caught, quickly gives it a revolving movement, and at the same time emits a band of threads from its spinners, thus enveloping its prey in a case like the cocoon of a silkworm. The spider now examines its powerless victim, and gives the fatal bite on the hinder part of the neck, and then retreating, it waits patiently until the poison has taken effect.